ENVIRONMENTAL SCIENCE – SPECIALIZATION (SCIENCE) – BACHELOR OF SCIENCE (HONOURS)

Subject: Administered by the School of Environmental Studies.
Plan: Consists of 72.00 units as described below.
Plan Code: ENSC-S
Program: The Plan, alone, or in combination with a Minor in another subject, and with sufficient electives to total 120.00 units, will lead to a Bachelor of Science (Honours) Degree.

Code	Title	Units
1. Core		
– CORE SCIENCE –		
A. Complete 3.00 units from the following:		**3.00**
BIOL 103	Fundamentals of Biology: Organisms to Ecosystems	
BIOL 111	Ecology and the Environment	
B. Complete the following:		
GPHY 102	Physical Geography and Natural Resources	3.00
C. Complete 3.00 units from the following:		**3.00**
GEOL 104	The Dynamic Earth	
GEOL 107	History of Life	
D. Complete the following:		
ENSC 201	Environmental Toxicology and Chemical Risks	3.00
ENSC 301	Environmental Assessment	3.00
– CORE SOCIAL SCIENCES AND HUMANITIES –		
E. Complete the following:		
ENSC 103	Environment and Sustainability	3.00
F. Complete the following:		
ENSC 230	Principles of Sustainability	3.00
ENSC 330	Applications of Sustainability	3.00
G. Complete the following:		
ENSC 502	Research Project Sustainability	12.00
2. Option		
– INTEGRATIVE SCIENCE –		
A. Complete 9.00 units from the following course list:		**9.00**
ENSC_Integrative_Science at the 300-level or above		
B. Complete 6.00 units from the following course list:		**6.00**
ENSC_Integrative_Science		
– INTERDISCIPLINARY SOCIAL SCIENCES AND HUMANITIES –		
C. Complete 9.00 units from the following course list:		**9.00**
ENSC_Interdisciplinary_SocSci/Huma		
3. Supporting		
A. Complete 6.00 units from the following:		**6.00**
CHEM 109 & CHEM 110	General Chemistry I: From Atoms to Matter and General Chemistry II: Thermodynamics and Kinetics	
or		
CHEM 112	General Chemistry	
or		
CHEM 113 & CHEM 114	General Chemistry I (with Virtual Laboratory): From Atoms to Matter and General Chemistry II (with Virtual Laboratory): Thermodynamics and Kinetics	
B. Complete 6.00 units from the following:		**6.00**
MATH		
STAT		
Electives and/or Other Plan Requirements		**48.00**
Total Units		**120.00**

4. Substitutions

A. ASCX 400/3.0 may be used towards Option **2.A.**, **2.B.**, or **2.C.** as approved by the Chair of Undergraduate Studies.

5. Notes

A. Students are advised to complete at least 15.00 units from the core and integrative science courses in their first year. Deferring 100-level courses to the final year of study is strongly discouraged.

B. Students choosing Supporting Courses option (CHEM 113/3.0 and CHEM 114/3.0) must note that these are not acceptable as prerequisites for upper-year CHEM courses and some other courses that include labs.

C. This Plan may not be combined with an ENVS Plan. Please refer to Academic Program Regulation 3 (https://arts-science/academic-programs/) for further information.

D. A maximum of 6.00 units from courses offered by other Faculties and Schools may be counted toward the program and/or Plan requirements. This includes courses in BMED, COMM, GLPH, HSCI, LAW, NURS, and courses offered by Smith Engineering.

Environmental Science Course Lists

The following lists may contain courses offered through other Departments. In accordance with Academic Regulation **2.6** (Access to Classes), students do not have enrolment priority in all of these courses. Access to these courses may only be made available during the Open Enrolment period, and then only if space permits.

ENSC_Integrative_Science

Code	Title	Units
BIOL 103	Fundamentals of Biology: Organisms to Ecosystems	3.00
BIOL 200	Diversity of Life	3.00
BIOL 212	Scientific Methods in Biology	3.00
BIOL 316	Fisheries Biology	3.00
BIOL 335	Limnology and Aquatic Ecology	3.00
CHEE 342	Environmental Biotechnology [1]	3.50
ENSC 201	Environmental Toxicology and Chemical Risks	3.00
ENSC 301	Environmental Assessment	3.00
ENSC 307	Marine Environmental Issues	3.00
ENSC 320	Wildlife Issues in a Changing World	3.00
ENSC 407	Global Water Resources: Challenges and Opportunities	3.00
ENSC 408	Wildfire Science and Management	3.00
ENSC 425	Ecotoxicology	3.00
ENSC 480	Special Topics in Environmental Science	3.00
GEOL 106	Environmental Geology and Natural Hazards	3.00
GEOL 107	History of Life	3.00
GEOL 200	Oceanography	3.00
GPHY 207	Principles of Biogeography	3.00
GPHY 208	Surface Processes, Landforms, and Soils	3.00
GPHY 209	Weather and Climate	3.00
GPHY 304	Northern and Arctic Environments	3.00
GPHY 310	Landscape Ecology	3.00
GPHY 312	Watershed Hydrology	3.00
GPHY 313	Glacier Processes and Dynamics	3.00
GPHY 314	Climate Change	3.00
GPHY 317	Soil, Environment, and Society	3.00
GPHY 318	Advanced Biogeography	3.00
GPHY 319	Contemporary Energy Resources	3.00
GPHY 320	Energy and Society	3.00

[1] Note that the unit weighting system in Smith Engineering differs from that in the Faculty of Arts and Science. Therefore, upon acceptance of any course from Smith Engineering, the unit weighting towards Arts and Science degree requirements shall be at the discretion of the Associate Dean (Academic). Usually, a one-term course shall count as 3.00 units and a two-term course as 6.00 units.

ENSC_Interdisciplinary_SocSci/Huma

Code	Title	Units
BLCK 320	Black Studies in Transnational Contexts	3.00
CLST 214	Ancient Science	3.00
DEVS 220	Introduction to Indigenous Studies	3.00
DEVS 221	Indigenous Studies II - Resistance and Resurgence	3.00
DEVS 250	Environmental Transformations	3.00
ECON 290	Environmental Economics and Assessment	3.00
ENGL 113	Reading for the Planet	3.00
ENGL 218	Introduction to Indigenous Literatures in Canada	3.00
ENGL 276	Literature and the Environment	3.00
ENSC 200	Environmental History	3.00
ENSC 245	Consuming the Environment	3.00
ENSC 290	Introduction to Ecological Economics	3.00
ENSC 301	Environmental Assessment	3.00
ENSC 307	Marine Environmental Issues	3.00
ENSC 310	Environmental Policy	3.00
ENSC 315	Sustainable Food Systems	3.00
ENSC 320	Wildlife Issues in a Changing World	3.00
ENSC 321	Environmental Justice in Global Context	3.00
ENSC 407	Global Water Resources: Challenges and Opportunities	3.00
ENSC 445	Waste Flows: Environmental Studies of Waste	3.00
ENSC 482	Special Topics in Environmental Studies	3.00
GNDS 212	Racism, Colonialism, and Resistance	3.00
GPHY 101	Human Geography	3.00
GPHY 319	Contemporary Energy Resources	3.00
GPHY 320	Energy and Society	3.00
GPHY 336	Geography, the Environment, and Human Health	3.00
GPHY 365	Geography, Development, and Environment in the 'Third World'	3.00
HLTH 235	Food Systems	3.00
INDG 101	Indigenous Knowledges and Perspectives	3.00
INDG 302	Indigenous Theories and Methodologies: Learning through Indigenous Worldviews	3.00
INDG 308	Learning from the Land	3.00
PHIL 203	Science and Society	3.00
PHIL 293	Humans and the Natural World	3.00

PHIL 493	Ethics and the Environment	3.00
RELS 235	Religion and Environment	3.00